Southern States. This was partially realized from an experiment made at Greenville, in the mountainous parts of South Carolina, by the late Junius Smith, in 1848 to 1852."

We are a little surprised that a man of Mr. Browne's information and knowledge of the South should express his surprise in the following manner:

"Considering the practical bearing this subject has on the economy and agricultural interests of our Southern States, it is surprising that a simple herb, which has proved of such universal acceptance, should retain this position in the world for centuries, and yet still continue to be restricted in its production almost entirely to the country of its origin."

That the tea-plant has not been extensively introduced into these States is simply because the "peculiar institution," instead of improving land or people, and introducing new products, blasts like a sirocco everything it breathes upon. When the lands of the South are opened to free labor, we shall have tea of home growth. The argument that we cannot compete with the cheap labor of China is simply ridiculous. Not compete with people that do not know the use of a plow or other labor-saving implements, and who transport whole cargoes of tea upon men's backs, a distance of a thousand miles from the plantation to the seaport. If the plant would grow in the New-England States as well as in South Carolina, we would soon show John Chinaman whether intelligence could compete with semi-barbarism or not.

The tea-plant will grow, as it does at Pekin, in lat. 40°; it also grows at Canton, lat. 23° 8'; but it grows best in mild climates, near streams, at the south side of mountains, in rich sandy loam. The shrubs can be grown from seeds as easily as hazle-nuts.

"The process of gathering tea is one of great nicety and importance. Each leaf is plucked separately from the twig; the hands of the gatherer are kept clean; and, in collecting some of the finer sorts, it has been stated, upon credible authority, that he is obliged for some weeks previous to abstain from all gross food, lest his breath or perspiration might injure the flavor; to wear fine gloves while at work, and to bathe two or three times a day during this period."

We fancy that the "foreign barbarians" in this country seldom get any of these "finer sorts." The flavor and color of teas are works of art. The "blooming green teas" are dyed at Canton with Prussian blue and gypsum, to suit the fastidious tastes of customers.

Among the valuable trees recommended for cultivation in this country, is the *Box-wood* (Buxus sempervirens arborescens), which is a hardy evergreen shrub, indigenous to many parts of Europe and Asia, the wood of which is of immense importance to the art of embellishing books, for which there is no substitute, and yet we are entirely dependent upon importation, which war with Europe might obstruct, to the very serious detriment of a very large body of men and women who are engaged in wood engraving.

The tree from which comes all the box-wood of commerce is one of great longevity, and subject to but few diseases, and is sufficiently hardy to stand the open air near Philadelphia, without protection during winter, where it has attained the hight of twenty-five feet, with a trunk two feet and a half in circumference, or about ten inches in diameter. It may be propagated from seeds, by cuttings, or by layers. The Turkey box-wood is principally grown in Circassia and Georgia, and is subject to long transportation by land to Odessa, for shipment.

Of trees yielding food for man that might be grown in this country to great advantage, the report mentions the *European Sweet Chestnut* (Castanea vesca), a native of Asia Minor, but cultivated in the temperate parts of Europe and Africa from time immemorial, which has proved itself well adapted to the climate of the Middle and Southern States, when grafted on stocks of the common chestnut. In parts of France, Spain and Italy, chestnuts are largely used for food, being a substitute for both potatoes and bread. They are boiled in water slightly salted, and sometimes flavored with leaves of sage, celery, or other herbs.

Several oaks not indigenous to this country might well be added to our stock. Among these the Report names the following:

"*The Grammont* or *Sweet-acorned Oak* (Quercus gramuntia), formerly a native of the wood of Grammont, near Montpelier, in France, and growing wild at present in great abundance in some of the forests of Spain, is quite hardy, maturing its acorns in England, where it has been introduced; and would be a desirable acquisition to our Middle and Southern States."

The acorns of this species are said to be as edible as chestnuts, if kept some length of time, by which they lose the tannin taste.

The Kermes Oak (Quercus coccifera), a low, bushy, evergreen shrub, much resembling a holly in miniature, a native of the south of Europe, might be grown as an ornamental tree, though it were not worth while to grow it for the production of the kermes (*Coccus ilicis*) which occurs as a parasitic insect, having all the appearance of a berry or seed, exhibiting not the slightest indication of its insect nature, being immovably affixed in clusters to the branches of the oak upon which it subsists, which was, before the discovery of cochineal, used as a valuable coloring matter. The tree will only produce kermes in warm latitudes.

Another oak that might undoubtedly be profitably grown in several of our mild climate States, is the one that produces gall nuts, which are much used by dyers and ink manufacturers.

The Gall-nut Oak (Quercus infectoria) is a native of Persia, Asia Minor, Arabia, Egypt, Morocco and Algeria; in its natural habitat it is an evergreen shrub, with a crooked stem, and seldom attains six feet in hight. The gall nuts are excrescences, produced by the *Cynips scriptorum*, a small insect of a pale-brown color, which may often be found inclosed in the galls sold in the shops of the druggists, collected before the fly had made its escape.

Another oak, the acorns and cups of which are in great demand for tanning purposes, is the *Valoria Oak* (Querens ægilops), which grows in Greece to a hight of 50 or 60 feet, and is found to be hardy in England. The acorns are worth $60 or $70 a tun for tanning.

Perhaps one of the most valuable fruit trees that could be introduced into some of the States, particularly California, would be the *Date Tree* (Phœnix dactylifera), which is indigenous to Syria, Arabia and the lower parts of Persia, Egypt and Northern Africa, whence it was introduced into the South of Europe; and it is also more or less cultivated in British India, South Africa, and in some parts of America.

The date-tree belongs to the family of palms, and grows fifty or sixty feet high, with a rugged trunk, crowned with leaves six feet long. The flowers start out from the trunk between the leaves, and bear fruit like berries on stems, and come in bearing at six to ten years old, and continue a century, producing several hundred pounds of dates to a tree every year.

"In Barbary people use the products of the date-tree for many purposes, as follows: They form handsome beads of the stones. From the leaves they make couches, baskets, bags, mats, brushes, and fly-traps; the trunk is split, and employed in erecting small buildings, also for fences to gardens; and the stems of the leaves are used for making cages for their poultry. The threads of the web like integument at the base of the leaves are twisted into ropes, which are employed in rigging small vessels. The amylaceous central part of the trunk is also good to eat, and the buds are esteemed a delicate vegetable; and even the young shoots are said to resemble asparagus. The sap, which is sweetish when first collected, may be drank as a mild beverage, and is distilled into a kind of spirit, known in Eastern countries by the name of 'arrack.'"

Dates are among the staple articles of food in countries where the tree grows naturally.

Another very valuable food-producing tree that has been naturalized in the West Indies, and might be in favorable localities in the Southern States, is the *Tamarind Tree* (Tamarindus indicus), a native of Egypt, Arabia and India. It grows now abundantly to a large size in Jamaica, in deep, rich, black mold, and produces excellent fruit, though different from that of the East Indies. It is grown in England as an ornamental tree. The fruit grows in pods, consisting of a hard seed, as much so as that of the plum, imbedded in pulp, which, boiled with sugar, or *sirop de battery* of the sugar plantation, makes an excellent acid preserved fruit, very cooling and grateful to fever patients.

Another tree, indigenous to the mountains of Central India, which affords a valuable gum, known in commerce as olibanum, it is thought might be adapted to similar situations in Southern States. This tree, the *Boswellia Serrata*, produced the frankincense of ancient times.

Another odoriferous gum-producing shrub is the *Balsam of Gilead Tree* (Amyris gileadensis), a native of Arabia, and grows spontaneously in the mountains of Yemen, to the hight of ten or twelve feet, with crooked spreading branches, bearing aromatic resin on the buds, which once had a very high value in the East, and it is now esteemed both as a medicine and odoriferous ungent or cosmetic.

But the most valuable of gum-producing trees capable of acclimation in this country is probably

"*The Egyptian Gum-Arabic Tree* (Acacia vera), which affords the finest gum arabic of commerce, is a native of the sandy deserts of Arabia, Egypt, and the western parts of Asia; it also grows abundantly in Barbary and other parts of Africa, particularly in the Atlas Mountains.

"The gum exudes spontaneously from the bark of the trunk and branches of the tree, in a soft or nearly fluid state, and hardens by exposure to the air, or to the heat of the sun. The more sickly the tree, the more gum it yields; and the hotter the weather, the more prolific it is."

It may not be amiss to state that one of the native trees of Texas and New-Mexico, belonging to the same family, affords a gum that may be found equally valuable, which can be obtained in the greatest abundance.

Another tree that produces a valuable gum which could probably be cultivated with success in California, and afford a valuable article in commerce, is the *Mastic Tree* (Pistacia lentiscus), a native of the south of Europe, the Levant, and the west of Asia. This tree is grown in Italy and Portugal, and exudes its gum through incisions in the bark. It rarely exceeds 12 feet in hight, and its natural form is very crooked.

Several medicinal shrubs and trees are brought to notice in this Report, worthy of the attention of a people who import drugs in such ship-load quantities as we do into the United States. One of the trees from which we derive large quantities of these importations is the *Quassia Plant* (Quassia amara), a native of Surinam, which is a beautiful shrub, or low tree, the roots, bark and wood of which afford the true officinal quassia of commerce. This plant is sufficiently hardy to withstand the Summer climate of England, and, consequently, would withstand the Winter of our extreme South. It is probably more hardy than the orange or lemon tree. We presume its extensive introduction into this country would be looked upon with favor by the brewers, and disfavor by the horse-flies. To one it is a substitute for hops—to the other a deadly poison.

The *Egyptian Senna Plant* (Cassia senna) grows spontaneously in Syria, Arabia and Upper Egypt, and is cultivated in Italy, the West Indies, and other parts of the world for its leaves, which form a considerable article of commerce. It grows a woody, branching stem, some two feet high, and has been produced in England, and might be in this country.

It is also probable that we might grow in South California, and perhaps in the Atlantic Southern States, the *Rhatany Plant* (Krameria triandria), indigenous to several provinces in Peru, delights in dry, argillaceous or sandy soils, and grows on the declivities of mountains exposed to the intense heat of the sun. It partakes of the form of an undershrub, with very long, much-branched, spreading roots, of a blackish-red color externally, red within, and having an intensely styptic, bitter taste. The root is astringent and aromatic; a tincture of it in brandy forms the basis, probably, of more port wine than all that is imported from Portugal.

An ornamental evergreen, as well as valuable timber tree, which also affords food, and which may be grown in California and New-Mexico, is the *Bunya-Bunya* (Araucaria bidwellii), a native of New-South Wales, which has been introduced in our conservatories in this country and England. It grows to a great hight, and bears immense cones, full of seeds resembling the kernel of an almond, which the natives roast and eat.

The *Deodar Cedar* is highly, but never too highly recommended, as one of the most valuable of timber trees that we could cultivate in this country. Much encouragement has been given to its introduction into England, and several thousand bushels of seed were imported from India a few years ago, which have produced a million of young cedars. The wood is very valuable, enduring the action of the elements for centuries, and it may be polished into beautiful furniture. As an ornamental tree the Deodar is unequaled.

No subject is of more importance than that of the introduction of such new plants and trees as are mentioned in this Report, and hence we have called attention to the subject. With such soil and diversity of climate as we possess, we ought to produce everything we require of earth's productions.

IMPORTANT DECISION.—The Secretary of the Interior has reversed this decision of the late Commissioner of Pensions in regard to what constitutes a *war* entitling soldiers to bounty land. The decision of the Secretary will entitle regulars and others who have been engaged in any of the conflicts with the Indians on the Pacific, New-Mexico, and on the Plains, to warrants under the recent acts of Congress. The Secretary takes the ground that Congress intended to provide for all cases where the circumstances actually constituted what might with propriety be styled *war*, in which life was imminently imperiled. The present Commissioner, Mr. Whiting, brings to his position a large experience and a patient and obliging disposition

Among those who cast their votes for Fremont at Syracuse on the 4th was Gideon Bentley, an aged survivor of the Revolution. He is the father of thirteen living children—the ancestor of six generations, numbering in all two hundred and twenty-four souls, who descended from him in direct line. He participated in the most important battles of our great struggle for Liberty—voted for Washington—has cast a ballot at every Presidential election since—and has, since the days of Jefferson until within a few months, been a soldier in the ranks of the Democracy.

FIRE—MULES BURNT.—A stable belonging to Messrs. D. & B. Forrer, at Shenandoah Iron Works, in Page County, Va., was consumed by fire on Tuesday night last, together with a large quantity of gears and thirty-six valuable mules. The loss supposed to be from $5,000 to $7,000.

INDUSTRIAL AND SCIENTIFIC INTELLIGENCE.

THOMPSON'S METALLIC COLLAPSABLE BOATS.—Mr. Nathan Thompson, jr., of this city, whose Life-Preserving Seat has been before noticed in our columns, has perfected a style of boat for shipping and military purposes which seems to possess valuable qualities. It is made with double sides, containing some inches of air between the surfaces, which renders it a life-boat suitable for any emergency; or it is capable of being made in a lighter form, well adapted for general service, in which form a substantial boat eighteen feet long and four wide weighs only from four hundred to six hundred pounds. The great feature of each is the capacity for being compressed into narrow limits and secured in that condition, so that several may be stowed in the space occupied by one of the ordinary styles. The "service boats," it is affirmed, fold into a thickness of six inches, and the "life boats" into a thickness of twelve inches—the length and depth remaining very nearly the same as when expanded.

The material is galvanized iron, securely fastened to strong oak frames. A species of truss stiffens the center line on the interior, and to this the bow and stern are connected by a kind of slip-joint. Each half of the bottom is attached to this truss by stout hinges, and, in the act of collapsing, folds up against the truss, while the sides, which must be previously relieved of the thwarts and of the various iron ties with turnbuckles which stiffen them, readily follow, and are remained until occasion demands the expansion of the whole again into a boat as before. The details are strong and convenient, so that no difficulty is likely to occur in putting the boats in readiness in a few minutes.

The joints are covered with a water-tight cloth, so as to allow sufficient motion—even the connection between the bottom and sides being kept up in this manner—the parts being so proportioned that the cloth is always maintained intact, without straining or much folding, and always ready to preserve every joint perfectly water-tight.

For military purposes several modifications are made which admirably adapt the invention to serve the purposes both of wagons and pontoon bridges. Foreign patents have been secured, and Mr. Thompson, after an exhibition in the Merchants' Exchange and elsewhere in this city, intends visiting Europe with a fully equipped boat for each of the principal Governments. Eight of them, precisely as above described, are now being constructed for the mammoth steamship Adriatic.

The great objection raised by ship owners to a full supply of boats for the escape of passengers from a foundering or stranded ship, or when enveloped in flames, has been that sufficient space could not be allotted to boats without so lumbering up the decks as to make it difficult to work the ship. How far Mr. Thompson's invention will overcome this difficulty depends on how few new evils may be found to attend its use; but so far as yet developed the invention seems extremely important. The only boat yet completed is a service boat for Gen. Harney, to be used in the Everglades of Florida.

SIEMENS'S REGENERATIVE STEAM-ENGINE.—The only ground on which superiority was ever looked for in Ericsson's Air Engine over good steam engines was in the supposed practicability of reserving a portion of the heat in the air which had been used, and employing it to aid in heating the air required for the next succeeding stroke. Ericsson's experiment was in the main a failure, but not on account of any fallacy in this principle. Ericsson's engines "burned out," or in other words the metal rotted in consequence of the great heat required to work air efficiently. Mr. Chas. W. Siemen, an English engineer and inventor of considerable note, has since endeavored to apply the same principle to steam-engines, and with such success that there are now several engines on this principle in constant operation at the works of Newal & Co., Gateshead, and in France and Germany, each from five to forty horse-power. The engine, as described by the inventor before the Royal Institution of Great Britain, seems to possess one feature common also to Ericsson's, and all other schemes of the kind, which must forever operate to hinder its general introduction—this is great weight and bulk, as compared with the power developed. Mr. Siemen employs wire gauze regenerators, quite similar, it would appear, to Ericsson's, and uses the steam in a highly superheated state—*i. e.*, at a temperature of from 600° to 700° Fahrenheit. In consequence of this high temperature, we might anticipate a rapid destruction of the iron through which this heat is transmitted from the fire; but he is led, by his own experience so far, to believe that his heating vessels will last from three to five years, and being only pieces of rough casting that can be replaced in a few hours at small expense, he concludes that he has partially solved the difficulty arising from high temperature. We notice the affair as an invention affirmed to be in actual operation, but the actual economy realized, if any, is not definitely stated.

PRESERVING TIMBER FROM DECAY.—The latest and simplest method of expelling sap from wood and supplying its place with a preservative fluid, is described as Dr. Boucherie's process in a report recently published by Day & Son, London. The plan requires no expensive apparatus, the preservative fluid, sulphate of copper, being applied under a pressure which tends to drive out the natural sap in a manner extremely primitive, which is as follows:

"Soon after the tree is felled, a saw-cut is made in the center, through about 9-10ths of its section. The tree is then slightly raised by a lever or wedge at its center, and the saw cut is then partially opened. A piece of string is then placed round the saw-cut, close to the outer circumference of the tree; the support is then withdrawn, and the saw-cut closes on the string, thereby making a water-tight joint. An augur hole is then bored obliquely into the saw cut, a wooden tube is then driven into the hole, the conical end of which is attached to a flexible pipe, which is in connection with a cistern or reservoir, at an elevation of from 30 to 40 feet above the tree intended to be preserved.

"When it is necessary to prepare timber in long lengths, a cap is placed on the end of the tree, by screws or dogs. Dr. Boucherie has found that the most efficacious solution is composed of sulphate of copper and water, mixed in the proportion of 1 by weight of sulphate of copper to 100 of water. The strength is easily ascertained by any intelligent workman by a hydrometer. The specific gravity of water at 60° of Fahrenheit being 1,000, if 1 per cent of sulphate of copper is added the specific gravity will be 1,006 nearly.

"It can be readily ascertained when the pressure has been on sufficiently long to have expelled the sap, and been replaced by the solution by means of prussiate of potash. If a piece of this crystal is rubbed on the timber when it is in a damp state, it will leave a deep red-brown mark, showing that the timber is sufficiently impregnated with the copper. The sap containing at most a 1,000th part of organic matter in solution, there is no inconvenience in employing it as a solvent. It is even preferable to many waters containing lime, which decompose a much greater proportion of sulphate of copper. Therefore, troughs are placed under the end of the trees to catch the sap and waste solution, and conducted to a reservoir to be pumped up and mixed again with copper to the proper strength. The best trees for the operation are the least costly; as, for instance, beech, birch, Scotch fir, alder, elm, poplar, &c. The sooner the trees are prepared after being felled, the better; consequently, the nearer they are prepared to the place where they are grown, the more advantageous it will be found. Trees felled any time from November to May, may be prepared in May; but if they are cut down in May, or any month from May to the end of November, they ought to be prepared within three weeks from the time of being felled.

"It has been found in the preparation of vast quantities of timber for the French navy and railways by this system, that the time necessary for the operation depends on the length of the tree and the description of timber. Trees of 40 feet in length are being prepared at Fontainebleau for the French navy, which require from eight to ten days before they are sufficiently impregnated; but for lengths of nine feet, twenty-four hours are found to be quite sufficient."

Dr. Boucherie is a French chemist, who has for 20 years directed his attention to this subject. An interesting illustration of the fact, first discovered, we believe, by the doctor, that the tubes of wood have no connection with each other laterally, was afforded in the exhibition at a late meeting in Glasgow, of a section of the trunk of a tree, on which the word "Farday" was distinctly legible, the letters having been formed at one end of the tree by a chemical substance which penetrated the pores of the trunk from one end to the other. We believe this process worthy of much attention on account of the small cost of labor and apparatus required. The cost of the copper required for the impregnation of a single railway sleeper in France is about ten cents.

DU TREMBLEY'S STEAM AND ETHER ENGINE.—Late accounts indicate that the invention tried a few years ago at the Novelty Works in this city, and later on a very extensive scale on some steamers on the Mediterranean, of employing the heat of exhaust steam to work an ether engine, has been proved impracticable. Ether is so much more volatile than water, that it was hoped a considerable gain of power could be realized from an ether engine so worked, without any cost for fuel, but the practical difficulties appear to have destroyed such hopes. The fact still remains that ordinary steam engines develope and utilize only from five to ten per cent of the power actually contained in the heat, yet this, it seems is not, in the present state of science, the way to improve thereon. The immediate cause of the abandonment of the ether apparatus on the large steamers *Le Jacquard* and *l'Arago* was the gradual escape of the vapor of ether through the stuffing boxes. It is probable that steam leaks gradually in the same manner, but the loss is not as serious in such case. The *Le Jacquard* is reported to have lost in this way a barrel or more of ether every day.

FEED HEATERS FOR LOCOMOTIVES.—About one-seventh more fuel is required to change cold water into steam than is required if previously heated nearly to boiling. Heaters deriving their heat from the spent or exhaust steam from the engine are in common use on all high-pressure stationary engines, but are generally too cumbrous to be be used on locomotives. Several inventions have been patented, however, within a few years, designed for locomotive use—some of which derive their heat from the exhaust steam and others from the hot smoke. Ebbert's, on the latter plan, consisting of many pipes, extending up and down the interior of the chimney, has met with considerable favor, and is now in use on no less than 26 locomotives on one road in the West.

CREAMER'S SELF-ACTING BRAKE OPERATOR.—W. G. Creamer's invention for applying all the brakes on a train of cars at the will of the engineer, has been several times proved the means of saving life and property. Why is it not more generally introduced on railroads? The plan consists in detaching, by pulling on the bell-cord, certain powerful springs previously wound up by the brakemen. The practical difficulties which hindered its success on its first introduction have been pretty satisfactorily overcome in the more recent constructions, and the various rival schemes seem to have quietly withdrawn. If there is no better device before the public, Creamer's brake operators should be at once adopted on all passenger trains.

ANTIDOTE FOR THE EFFECTS OF STRYCHNINE.—A case has been recently reported in which a man who had taken four grains of strychnine was kept under the influence of chloroform until an emetic was finally, after several unsuccessful attempts, induced to operate. The spasms returned in a few minutes, however, and the patient was finally kept under the influence of chloroform for eight hours, after which the effects of the poison were no longer visible. One grain of strychnine is usually sufficient to induce death.

PORK FOR JOURNAL BOXES.—Salt pork as a principal, with one or two other simple ingredients, forms the composition patented by Eleazor Brown, jr., of Binghamton, this State, in July, 1855, as a lubricator for the boxes of railroad cars. The material is in quite successful use on several railroads.

LARGE ROCKETS.—Wm. Hall, an Englishman, in a lecture recently delivered on rockets, exhibited several of one cwt. each, designed for war purposes. By an improvement lately devised the issuing gas gives a twisting motion like that of a rifle-ball, so that great accuracy of flight may be depended on.

NEW INVENTIONS.

MR. BESSEMER'S INVENTION.—We had the satisfaction of witnessing, yesterday among a crowd of the scientific and the curious, one of this ingenious inventor's experiments on the manufacture of malleable iron. From the tapping of the blast to the production of an ingot of the malleable metal, weighing about a quarter of a tun, half an hour only transpired; whereas, by the old process, the same operation would have taken six hours, producing an inferior article, with a large expenditure of fuel. The experiment is highly imposing, and, considered in the mere light of a pyrotechnic exhibition, well worth seeing. The heat produced in the molten mass by the combustion of the carbon chemically combined with the cast iron is immense, and is accompanied by the discharge of a coruscation of sparks composed of carbonic acid gas along with slag. And toward the termination of the process a mass of all the impurities of the iron is vomited from the furnace in the shape of slag. We may add that before the performance of the experiment Mr. Bessemer delivered a lecture, explaining the rationale of his invention, which for unaffected clearness, modesty and simplicity, reminded us of a lecture of Faraday. It gives us pleasure to state that the privilege of using the invention has been already disposed of to the extent of the annual production of 100,000 tuns of iron and steel. (The fortune accruing to the inventor is gigantic.) [Examiner, Oct. 18.

VALUABLE DISCOVERY IN METALLURGY.—*The Manchester Guardian* says that M. de Lille of Paris has discovered a process by which aluminium may be obtained from cryolite, so as to afford it at as low a price per ounce as silver; and, since an ounce of the former has four times the volume of an ounce of the latter, it will of course give us articles of plate of the same size so much cheaper—that is, at one-fourth the price.

LOVE AND MURDER.

TRIAL OF HAYT FOR THE MURDER OF MISS ALLEN.

From The Erie (Pa.) Observer.

This case has excited much interest in the community, and is one of extraordinary character. The trial came on at the November sessions of our Oyer and Terminer, before the Hon. John Galbraith, President Judge, Joseph M. Sterrett and James Miles, associates. It appeared in evidence, on the part of the Commonwealth, that Hayt had become acquainted with Miss Calista C. Allen while living with his sister in McKean township, in this county, during the autumn of 1855. She was there in the capacity of servant maid, and was at the time in the thirteenth year of her age. After living there some time she left and went home, when Hayt also left and engaged board with Miss Allen's father.

During the last Winter the deceased went to school, and shortly after she commenced the prisoner also went to school, although about 42 years old, and continued going during the Winter. In the Spring he rented a farm for Allen, moved him and his family on to it, and went himself to board with his step-father, a Mr. Oliver, who lived about half a mile distant. Up to the time of the murder, Hayt often visited at Allen's and aided him by procuring for him a team and farming utensils, and by his own personal labor. He also purchased goods and necessaries for the family, and made many presents to deceased, to whom he became much attached.

This attachment had become known to the family, but as she did not reciprocate it, he was much distressed and agitated when urged to give her up. This was testified to by her parents as well as other witnesses. On the Saturday preceding the murder, the prisoner, in company with her parents, went to McKean Corners, and purchased on his credit some store goods for them, and some $15 worth for the girl. It would seem that on the day following (Sunday) some conversation took place between Hayt and Miss A. about getting married, when, it would seem from the testimony, though not directly, that she refused to marry him. He staid all night at Allen's, and in the morning (the day of the murder) went home, ate his breakfast, hitched up a horse to a plow, returned to Allen's, and assisted him to plow half an acre of potatoes. He then returned home, put the horse out, did some little work about the house, such as bringing water, cutting wood, &c.

After dinner he took down a revolver that he had, and went away in a different direction from that which would have taken him to Allen's. About 1½ o'clock p. m. he came to Allen's, and sat down in the kitchen, near the door of an adjoining room in which deceased and her mother were sitting. After the usual salutation the deceased said, "Walter, I should not think you would come here if you thought I abused you." To which he replied, "Come to think, I don't know that you did abuse me; I said so, but did not mean it." He then spoke of what he had given her on Saturday. She said, "You know I never asked you for anything." He replied, "I know it, but I am glad I got them for you," and then said he would get her a bonnet and a pair of shoes. At this the mother said, "Calista, if you don't mean to have Walter, you ought to tell him so." She replied, "I did tell him so, and I wish he would not come here again," at the same time closing the room door suddenly.

Hayt thereupon arose, stepped into the room, placed a revolver at the head of deceased and discharged it, the ball entering through the upper part of the temporal bone. The mother sprang from her seat, and rushing out of the room, fell over the stove-hearth in the kitchen.

About the time she fell Hayt fired at her, but she escaped the shot by falling. He fired again at her, but missed; and a third time he fired at her after she was out of doors, and followed her to the gate, but she made her escape. He then returned to the house, and finding the deceased on the floor, took her up, laid her on the sofa, and putting the pistol to her ear, again shot her. He then left, and taking the nearest route to the village, soon arrived there.

Meantime Allen came from the field where he was working, and found his daughter on the sofa, dead. Alarm was soon given, the neighbors collected and search was commenced; but while search was being made for the prisoner, he had gone to McKean Corners and given himself up, owning the act—saying that he "had killed her;" telling the circumstances that he intended to do so; that he loved her as he did his life; that he knew the consequences of the act; that he would not recall the dead if he could; that he was not sorry for anybody but his mother.

For the defense, it was alleged that the prisoner was laboring under a species of insanity called moral mania, which deprived him of the power of deliberate or premeditated action, necessary to constitute the killing murder in the first degree, under the act of 1794.

The outline of the evidence went to establish the fact that many years before the prisoner had been crossed in an attachment for a girl whom his friends opposed his marrying; that he became gloomy and solitary; that subsequently he formed an unnatural and frantic attachment for a half sister; that he showed strong and almost unmistakable evidence of derangement or mania in this matter. He would walk about in the night, and cry and moan like a person in despair, and at the same time acknowledged that he knew his attachment was wrong. This lasted for a period of several months. He at last left home and overcame his morbid state of feeling. He next formed a similar attachment for a niece of ten years of age, exhibiting all the uncontrollable emotion and agony that had existed in regard to his half sister. He escaped from the terrible feeling by removing from the immediate neighborhood of the child in question.

Some months after his restoration to peace and quiet he became acquainted with the deceased, who as has been stated, was working in the house where he boarded with a sister. When she left and went home, he also went to her father's house to live—when she went to school he also went to school. In short, he was totally unable to separate himself from her. At times he exhibited great depression and gloom—was much agitated and extremely unhappy and desponding. Friends attempted to arouse him from yielding to an attachment which he seemed to speak of so despondingly.

The Jury, after retiring for about an hour, returned a verdict of murder in the second degree. The prisoner was then sentenced by the Court to solitary confinement in the Western Penitentiary for the term of ten years.

KANSAS.

Correspondence of The Missouri Democrat.

LAWRENCE, KANSAS, Nov. 6, 1856.

At the earnest solicitation of his Excellency, Gov. Geary, Judge Lecompte consented to call a Special Term of the Court for the trial of the men who were arrested at Hickory Point on the 15th of September last.

The Court convened. The Grand Jury, composed entirely of the most ultra Pro-Slavery men, entered upon the discharge of the labors imposed upon them, and, as a matter of course, commenced indicting every Free State man that was identified in any way with the recent difficulties.

The young men engaged in the attack upon the fort at Hickory Point were all indicted for "murder in the first degree." Many others were indicted for other offenses, and the Marshals of the Territory were all supplied with writs for the arrest of different persons, and they were sent out on a grand hunt, having the United States troops to aid them in making arrests. Some have since been taken and confined in the Lecompton prison house, where they now are awaiting trial, while the Marshals are riding up and down the country finding others to serve their writs upon.

While this has been going on no Pro-Slavery man has been arrested. It is said (for effect only) that several of the Pro-Slavery leaders have been indicted, and that an attempt will be made to bring them to justice. With a one-sided, Pro-Slavery court, and marshals very careful to guard the interests of the slave oligarchy, a Grand Jury was subpoenaed, composed of Pro-Slavery men, and the petit jurors were members of the same party. In a district where four fifths of the residents are Free-State men, not one was called upon to sit as a juryman. The marshal would go into a community where there were ninety-nine Free-State men and one Pro-Slavery man, and he would be sure to call upon the *one man* to act on the jury. In this way he has been successful in getting a jury pronounced sound on the goose by the "Law-and-Order" party, as they style themselves.

However, Marshal Donaldson made a mistake, and got one Free State man among his jurymen. He was challenged, however, by the counsel for the prosecution, and the mistake corrected.

The trial commenced. Four men indicted for "assault and battery, with intent to kill," were arraigned before the Court. The examination of witnesses was gone through with and the case left with the jury, and the men were acquitted. A Mr. Baniter was then tried for the same offense and convicted by the jury. The Judge sentenced him to "*six years imprisonment in the Penitentiary.*"

On Thursday, Oct. 30, the following named persons were arraigned before the Court for trial on an indictment for "murder in the first degree":

James H. York, Howard York, John L. King, George N. Neff, Thomas J. Bowers, David Patrick, Justus G. Ketchum, Jesse F. Pyle, James Cooly, Adam Bower Edward R. Folley, David Potter, Thomas Leeson, William Butler, Chester Hay.

They were indicted for being engaged in the attack upon Hickory Point on the 14th of September, and the murder of Charles G. Newhall, who was shot on that day during the fight, by a ball that, in the words of the indictment, "caused a wound upon the person of the "said Charles G. Newhall fifteen inches long, six inches "deep and one inch wide," of which wound he is supposed to have died.

The examination of the witnesses commenced, the following gentlemen appearing for the Government:

Chas. Grover of Kickapoo, formerly of Kentucky; Daniel N. Grover, ditto; D. J. Johnson of Leavenworth City, formerly of Georgia; Col. Isaacs, Attorney-General of the Territory.

For the defendants appeared Marcus J. Parrott, Leavenworth City, formerly of Dayton, Ohio; William Stephens, recently from Mansfield, Ohio; W. P. Lamb of Atchison, formerly of Kentucky; A. D. Read, Tecumseh, formerly of Kentucky; and George P. Putman, Lecompton, formerly of Louisiana.

Messrs. Lamb and Putman were both engaged in the defense of the fort at Hickory Point when the attack was made by Col. Harvey. They are both, and also Mr. Read, Pro Slavery men, who generously consented to appear for the defense.

The witnesses were sworn, and testified to the fact of an attack having been made upon Hickory Point, and that Charles G. Newhall was killed on that day. They were not able to identify the prisoners at the bar as members of Harvey's party. Only one witness swore that one of the prisoners, James H. York, was there on that occasion. The defense afterward introduced evidence proving that Mr. York was at Grasshopper Falls at the time of the attack upon the fort, and consequently could not have been there to have taken part in the engagement.

It was also established that the persons in the front discharged the first gun, and commenced the fight, having a *black flag* waving over them at the time. The prosecution introduced no evidence to establish the fact of Mr. Newhall being shot by the enemy or that he died of his wounds.

The examination of witnesses concluded on the afternoon of Saturday last.

The Judge read his charge, which he said was incomplete, not having sufficient time to prepare it. Special instructions were submitted in writing by the counsel on either side, and after being modified by the Court, were given to the Jury.

Mr. Charles Grover then made his argument in behalf of the prosecution, reading what he alleged were analogous cases from the books, and endeavored to establish the guilt of the prisoners at the bar of murder in the first degree.

He was followed by Mr. Johnson, who made a flaming, red-hot Border Ruffian speech, addressed to the defendants; denouncing them in unmeasured terms, declaring that every one of them ought to be hanged.

He was followed by Mr. D. N. Grover, in an argument of considerable ability in the main, but he allowed himself to wander from his subject, and discuss the merits of the Constitution, the Territorial laws, the memory of our Revolutionary fathers, and the "Law and Order" party of Kansas. A considerable portion of his speech was of a personal character, denouncing the prisoners and their friends in the States for hating Slavery.

He concluded, and Mr. Putman made the opening argument in behalf of the defense, reviewing the evidence introduced by the prosecution.

He was followed by Mr. Read in a speech of considerable force, making a clear and convincing statement of the case.

After him came Mr. Lamb, who made a powerful appeal to the Jury, and a most rigid investigation into the evidence introduced by the prosecution, and the conclusions and arguments of the opposing counsel.

After he had concluded the Court adjourned until Monday morning, at which time Mr. Stephens addressed the Jury in an able and eloquent manner, briefly reviewing the evidence and the conclusions of the Attorneys for the prosecution, referring to the law to establish his conclusions, manifesting great legal ability.

He was followed by Mr. Parrott, senior counsel for the defendants, who made the closing argument in their behalf. It was an able effort, and reflects credit upon the distinguished author.

Col. Isaacs then closed for the Government, avoiding the errors made by his colleagues, of indulging in personal remarks toward the prisoners at the bar. He confined himself to his subject. After he had concluded his remarks, the Judge gave his charge to the jury, and they retired, and after an absence of an hour and a half, returned with a verdict of "Not guilty." Eight of the prisoners were then released, and the rest remanded back to prison to await trial on other charges found against them, and thus terminated the first trial for *murder* in Kansas.

There is a difference in the opinions and feelings of the Pro-Slavery men. Some of them are ultra and wish to push matters to the extreme; they will not be satisfied with anything short of a conviction and death of all the Free State men now in prison. Others are more generous; they wish Slavery established here, but they want it done in a quiet manner, without much excitement and are willing the Free State men shall live provided they will leave the Territory.

During the week, Marshal Fain has been in town two or three times, with a writ for the arrest of Capt. Walker, the commander of Gov. Geary's militia. Walker refused to go to Lecompton at this time. Fain returned to Lecompton and came back a day or two since with some United States troops, but Walker was not found. The Marshal threatens to bring a sufficient force to secure his arrest and it is understood that Col. Titus and his two companies are the forces to be used for such a purpose. If he comes here with Col. Titus and his men, there will certainly be a fight between them and Walker's men, which will be the commencement of another war. Capt. Wood of the United States Army who has been stationed here for several weeks, has moved his camp into the immediate vicinity of Capt. Walker's. What his object is in doing so is not yet known.

The election is now over, and perhaps the Pro-Slavery party are desirous of having a war, for the purpose of exterminating the Free-State men, and the attempted arrest of Capt. Walker is the excuse.

Your correspondent "John Smith" has left for the East. I believe he intends returning at an early day.

Yours ESSEX.

P. S.—Information has been received in this city that a Free State man, residing on Ottawa Creek, was shot at and nearly murdered on Saturday last, while on his way to Westport, Mo. He was near Bull Creek when attacked, robbed, and left for dead, by a party of Georgians, who have been prowling about in the southern portion of Kansas for some time. At last accounts the unfortunate man was just alive. He was found on the road by some travelers on their way to Missouri, and cared for by them.

Where is Gov. Geary that he don't drive these marauders out of Kansas? If it were the Free-State men committing these depredations, he would have them all arrested or Kansas full of soldiers. But his Excellency favors the other party. E.

A SLIGHT MISTAKE.

To the Editor of The N. Y. Tribune:

SIR: I find a paragraph going the rounds of the papers, and, if I mistake not, THE TRIBUNE has given to it its indorsement, to the effect that Gen. Washington and Col. Fremont were the only Presidential candidates who had ever received the undivided electoral vote of New-England. Such, however, is not the fact. I find, on looking over the record, that not only did Washington twice receive the undivided support of New-England, but it was given to John Adams in 1796, and again in 1800, when he was beaten by Thomas Jefferson in the general result. Again, in 1824, did New-England give her united vote for John Quincy Adams; and in 1828 did the same, with the exception of one elector in Maine, who voted for Andrew Jackson. Thus we see the recent election is the fourth, since Washington's last election, in which New England has given her united voice for her favorite candidate; and she expects to do the same again in 1860, when a majority of her sister Commonwealths, she hopes, will be sufficiently aroused and enlightened to sustain her in her stand for God and humanity.

Grafton, Mass., Nov. 17, 1856. K. K.

[We believe some correspondent of THE TRIBUNE did say New-England was never before unanimous since Washington's time; but the mistake was so obvious that we did not think it needed correction. [Ed.

A new kind of india-rubber overshoe is announced, by which the unhealthiness and unpleasantness arising from the use of rubbers is obviated. The peculiarity consists in making the shoes with the inner surface ribbed, corrugated, or otherwise made uneven, for the purpose of allowing a circulation of air between it and the boot or shoe over which it is worn; or the same thing may be effected by lining the shoe with a similar ribbed, corrugated, or otherwise raised and depressed surfaced fabric.

INFANTICIDE IN HUDSON.—In Hudson, last week, a dissolute woman named Mary Tuttle aged about 30 years, killed her only child, a boy of about three years, by throwing it into a privy vault. It appears that the horrible deed was committed to gratify a "lover."

PUBLIC MEETINGS.

AMERICAN INSTITUTE FARMERS' CLUB.

TUESDAY, Nov. 18.—Dr. WATERBURY in the Chair. The Secretary called the attention of the Club to the fact that a company has been organized in this city to furnish green sand marl to all applicants.

Mushrooms.—Mr. BLOTT of Yorkville cultivates mushrooms, providing crops all the year.

The Secretary read a great amount of interesting matter, translated from French journals, or selected or made up from English papers, and other recent publications. Among other things treated on were the following:

Hurricanes.—A Mr. Andrews of Havana has been searching all the accounts ever published of hurricanes, and has made the following analysis of the proportion of these tempests in different months of the year, to wit:

January	5	July	42
February	7	August	96
March	11	September	80
April	6	October	69
May	5	November	17
June	10	December	7

This proves the winter months the most favorable season to go to sea.

Statistics of England.—Cultivated lands and all their appurtenances are estimated worth $10,860,000,000. The whole property of the kingdom is estimated to be worth $22,235,000,000.

It would take 200 years for California to produce, at $50,000,000 of gold a year, the value of the agriculture of England.

Animals.—There are 140,000 animals known to man; yet we have domesticated but 43,000. In France the Giraffe has produced young that flourishes. A new species of horse from the wilds of Hindostan, has also been domesticated in Paris.

Experiments.—From the Journal of Agriculture: The vulgar frequently laugh at the labors of learned men, yet upon their researches the world depends. Experiments have been tried, and demonstrate that good crops can be raised by good tillage, without manure. Wheat at the rate of 34 bushels an acre has grown, year after year, by planting it in rows and hoeing.

Carrying Stock on Railroads.—In England it is estimated that bullocks driven 160 miles lose 20 pounds each, sheep 8 pounds, swine 10 pounds. In 1853 seven railways brought to London 120,000 head of live stock. In 1854 they brought over two millions. The same year 1,700 tons of killed meat and poultry were brought to London by the great Northern Railway.

Milk Product.—The London cows yield nine quarts daily. The freight of milk on railways is three farthings a gallon for 40 miles, and one penny a gallon for greater distance. The milk sells at 10 to 14 cents a gallon, wholesale.

Chinese Sugar Cane.—The Secretary read an article upon this subject showing that Lindley has stated that there are a large number of plants of this family, so nearly allied that they would probably hybridize. Mr. Vail, of the farm school of Westchester County, stated that they had produced good sirup in paying quantities, by rude means. As a fodder-producing plant, the Sorgham is invaluable. Planted thick, it grows ten feet high, and cattle eat the stalks down to the ground, if chaffed, with great avidity. Mr. Vail thinks it an invaluable plant for a forage crop.

SOLON ROBINSON said: Mr. Chairman, I hold in my hand a paper of very great importance to the farmers of America who are engaged in the production of oil or fat-producing animals. I offer this paper for the purpose of placing it on record among the transactions of this Institute. Mr. R. then read from the commercial article of THE TRIBUNE of Nov. 12, an account of the production of oil, &c., from the Breckenridge coal.

Dr. WATERBURY thought this a very important matter in its bearing upon the production of pork, lard and lard oil in this country. He inquired if any exper